

Claims

- [c1] 1. A method for correcting a ground rule violation for a target via pair in a design, the method comprising the steps of:
- generating a redundant via for a target via of the target via pair where the redundant via corrects the ground rule violation; and
 - removing the target via corresponding to the redundant via to correct the ground rule violation.
- [c2] 2. The method of claim 1, wherein the generating step includes generating a redundant via for each target via of the target via pair, and the removing step includes removing the redundant via for one of the target vias and removing the redundant via for the other of the target vias.
- [c3] 3. The method of claim 1, further comprising the step of identifying the target via pairs that violate a ground rule prior to the generating step, and distinguishing those target via pairs from other structure.
- [c4] 4. The method of claim 1, further comprising the step of identifying which target vias acquired a redundant via by

the generating step prior to the removing step, and distinguishing those target vias from other structure.

- [c5] 5. The method of claim 1, wherein the ground rule is a different-net spacing ground rule.
- [c6] 6. The method of claim 1, wherein the generating step includes generating the redundant structure where no spacing ground rule violation occurs for a new technology.
- [c7] 7. The method of claim 1, further comprising the steps of repeating the generating and removing steps for each level of a design.
- [c8] 8. A system for correcting a ground rule violation for a target via pair in a design, the method comprising the steps of:
 - means for generating a redundant via for a target via of the target via pair where the redundant via corrects the ground rule violation; and
 - means for removing the target via corresponding to the redundant via to correct the ground rule violation.
- [c9] 9. The system of claim 8, wherein the generating means includes means for generating a redundant via for each target via of the target via pair, and the removing means

includes means for removing the redundant via for one of the target vias and removing the redundant via for the other of the target vias.

[c10] 10. The system of claim 8, further comprising the means for identifying the target via pairs that violate a ground rule prior to generating the redundant vias, and means for distinguishing those target via pairs from other structure.

[c11] 11. The system of claim 8, further comprising means for identifying which target vias acquired a redundant via prior to removing the target via, and means for distinguishing those target vias from other structure.

[c12] 12. The system of claim 8, wherein the ground rule is a different-net spacing ground rule.

[c13] 13. The system of claim 8, wherein the generating means includes means for generating the redundant structure where no spacing ground rule violation occurs for a new technology.

[c14] 14. The system of claim 8, further comprising means for repeating the generating and removing steps for each level of a design.

[c15] 15. A computer program product comprising a computer

useable medium having computer readable program code embodied therein for correcting a ground rule violation for a target via pair in a design, the program product comprising:

program code configured to generate a redundant via for a target via of the target via pair where the redundant via corrects the ground rule violation; and program code configured to remove the target via corresponding to the redundant via to correct the ground rule violation.

[c16] 16. The program product of claim 15, wherein the generating code includes program code configured to generate a redundant via for each target via of the target via pair, and the removing code includes program code configured to remove the redundant via for one of the target vias and removing the redundant via for the other of the target vias.

[c17] 17. The program product of claim 15, further comprising the program code configured to identify the target via pairs that violate a ground rule prior to the generating code execution, and program code configured to distinguish those target via pairs from other structure.

[c18] 18. The program product of claim 15, further comprising program code configured to identify which target vias

acquired a redundant via by the generating step prior to the removing code execution, and program code configured to distinguish those target vias from other structure.

- [c19] 19. The program product of claim 15, wherein the ground rule is a different-net spacing ground rule.
- [c20] 20. The program product of claim 15, wherein the generating code includes program code configured to generate the redundant structure where no spacing ground rule violation occurs for a new technology.